## MINUTES RADIATION MANAGEMENT ADVISORY COUNCIL

October 4, 2018

Tulsa Technology Center-Riverside Campus Tulsa, Oklahoma

Official after RMAC Approved at March 28, 2019 meeting

Notice of Public Meeting – The Radiation Management Advisory Council convened for a Regular Meeting at 10:00 a.m. on October 4, 2018, at the Tulsa Technology Center-Riverside Campus, 801 East 91<sup>st</sup> Street, Tulsa, Oklahoma. The meeting was held in accordance with the Open Meeting Act, with notice of the meeting given to the Secretary of State on December 5, 2017. The Agenda was duly posted at the facility and at the DEQ twenty-four hours prior to the meeting. Mr. George MacDurmon, Chair, called the meeting to order. Ms. Quiana Fields called roll and a quorum was confirmed.

MEMBERS PRESENT

DEQ STAFF PRESENT

Wayne Conway Shawn Heldebrandt Karen Jennings Jeffrey Lux Mike Broderick Karen Jayne Keisha Cornelius Michael Reid Mike Stickney

Chad Mashburn
Charles Shepherd

Mike Stickney Ouiana Fields

Kurt Steincamp George MacDurmon

OTHERS PRESENT

Marlene Johnson, Court Reporter

MEMBERS ABSENT Chris Honigsberg

Approval of Minutes – Mr. MacDurmon called for a motion to approve the Minutes of the April 6, 2017 Regular Meeting. Mr. Steincamp made the motion to approve and Dr. Jennings made the second.

See transcript page 4 = 3				
Wayne Conway	Yes	Chad Mashburn	Yes	
Shawn Heldebrandt	Yes	Charles Shepherd	Yes	
Karen Jennings	Yes	Kurt Steincamp	Yes	
Jeffrey Lux	Yes	George MacDurmon	Yes	

Election of Officers for Council Year 2018 – Mr. Mike Broderick, Environmental Programs Manager of the Land Protection Division (LPD), presided over nominations for Chair. Mr. Broderick entertained a motion for Chair. Dr. Jennings made a motion to nominate Mr. MacDurmon and Mr. Steincamp made the second.

	See transcript pages 5 - 6				
Wayne Conway	Yes	Chad Mashburn	Yes		
Shawn Heldebrandt	Yes	Charles Shepherd	Yes		
Karen Jennings	Yes	Kurt Steincamp	Yes		
Jeffrey Lux	Yes	George MacDurmon	Yes		
701110)					

Mr. Broderick turned it over to Mr. MacDurmon to open nominations for Vice-Chair. Mr. Steincamp made a motion to nominate Dr. Jennings as Vice-Chair and Mr. MacDurmon made the second.

See transcript pages 6 - 8				
Yes	Chad Mashburn	Yes		
Yes	Charles Shepherd	Yes		
Yes		Yes		
Yes	George MacDurmon	Yes		
	Yes Yes Yes	Yes Chad Mashburn Yes Charles Shepherd Yes Kurt Steincamp		

Introduction of members of the staff present – Mr. Broderick introduced himself and had the DEQ staff and Councilmembers introduce themselves as well.

See transcript pages 8 - 13

Introduction of members of public present – Casey Schmitz, Assistant Radiation Staff Officer of the University of Oklahoma introduced herself.

See transcript page 13

Section Activities and Events – Mr. Broderick provided an overview of several activities and events occurring within the Radiation Section.

See transcript pages 13 - 16

Report by the Chair on matters of interest - None

Report on Potential, Upcoming Rule Changes – Mr. Michael Reid talked on DEQ Radiation rule changes.

See transcript 16 – 18

Report on NRC amendments to Part 35 Medical Rules – Ms. Keisha Cornelius gave a presentation on NRC amendments to Part 35 Medical Rules.

See transcript pages 18 - 21

New Business - Dr. Jennings stated that she read that the EPA is considering easing up on the radiation rules.

See transcript pages 21 - 24

Next Meeting – The proposed RMAC meeting dates for 2019 will be on Thursday, March 28 in Oklahoma City and Thursday, September 26 in Tulsa, Oklahoma.

See transcript pages 24 - 28

**Announcements** – None

**Adjournment** – Mr. MacDurmon called for a motion to adjourn. Mr. Mashburn moved to approve and Mr. Shepherd made the second. Meeting adjourned at 10:35 a.m.

Transcript and Attendance Sheet are attached as an official part of these Minutes.

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

## RADIATION MANAGEMENT ADVISORY COUNCIL

REGULAR MEETING

OCTOBER 4, 2018

Oklahoma Department of Environmental Quality
Tulsa Technology Center-Riverside
801 East 91st Street
Tulsa, Oklahoma

WORD FOR WORD REPORTING, L.L.C.
111 HARRISON AVENUE
SUITE 101
OKLAHOMA CITY, OKLAHOMA 73104
(405) 232-9673

REPORTED BY: MARLENE JOHNSON, CSR

/ / IA1	AO Meeting 10/04/2010		Pages 4
1	COUNCIL MEMBERS PRESENT:	1	MC CUITAIN EIFIDC. No 1992
2	Chairman George MacDurmon	2	MS. QUIANA FIELDS: Mr. Lux?
	Vice-Chair Dr. Karen Jennings	-	MR. JEFF LUX: Here.
3	Mr. Wayne Conway	3	MS. QUIANA FIELDS: Mr. Mashburn?
4	Mr. Jason Kurt Steincamp Mr. Steve Woods	4	MR. CHAD MASHBURN: Here.
•	Mr. Shawn Heldebrandt	5	MS. QUIANA FIELDS: Mr. Shepherd?
5	Mr. Chad Mashburn	6	MR. CHARLES SHEPHERD: Here.
	Mr. Jeff Lux	7	MS. QUIANA FIELDS: Mr. Steincamp?
6 7	Mr. Charles Shepherd	8	MR. JASON KURT STEINCAMP: Here.
8	ALSO PRESENT:	9	MS. QUIANA FIELDS: Mr. MacDurmon?
9	Ms. Quiana Fields	10	MR. GEORGE MACDURMON: Here.
	Mr. Mike Broderick	11	MS. QUIANA FIELDS: We have a quorum.
10	Ms. Karen Jayne	12	MR. GEORGE MACDURMON: Thank you. Okay. The
11	Ms. Keisha Cornelius	13	next item on the agenda is the approval of the minutes
11	Mr. Mike Stickney Mr. Michael Reid .	14	from our last meeting from April the 6th of 2017. So de
12	V. V	15	I hear a motion to approve the minutes?
13		16	MR. JASON KURT STEINCAMP: Motion to approve
14		17	the minutes.
15 16		18	
10 17			DR. KAREN JENNINGS: Second.
18		19	MR. GEORGE MACDURMON: Ms. Fields?
19		20	MS. QUIANA FIELDS: Mr. Conway?
20		21	MR. WAYNE CONWAY: Yes.
21 22		22	MS. QUIANA FIELDS: Mr. Heldebrandt?
22		23	MR. SHAWN HELDEBRANDT: Yes.
24		24	MS. QUIANA FIELDS: Dr. Jennings?
25		25	DR. KAREN JENNINGS: Yes.
	Page 3	<del> </del>	Pag
1	CALL TO ORDER: 10:00 A.M.	1	MS. QUIANA FIELDS: Mr. Lux.
2	MR. GEORGE MACDURMON: Okay. I'd like to call	2	MR. JEFF LUX: Yes.
3	this meeting to order. This October 4, 2018, public	3	MS. QUIANA FIELDS: Mr. Mashburn?
4	meeting of the Radiation Management Advisory Counsel was	4	MR. CHAD MASHBURN: Yes.
5	called in accordance with the Open Meeting Act.	5	MS. QUIANA FIELDS: Mr. Shepherd?
6	Notice for this meeting was filed with the	6	MR. CHARLES SHEPHERD: Yes.
7	Secretary of State on December 5th of 2017. The agenda	7	MS. QUIANA FIELDS: Mr. Steincamp?
8	was duly posted 24 hours prior to the meeting at this	8	MR. JASON KURT STEINCAMP: Yes.
9	facility and at the DEQ.	وا	MS. QUIANA FIELDS: Mr. MacDurmon?
10	Only matters appearing on the posted agenda may	-	
11	be considered at this regular meeting. In the event that	10	MR. GEORGE MACDURMON: Yes.
		11	MS. QUIANA FIELDS: Motion passed.
12	this meeting is continued or reconvened, public notice of	12	MR. GEORGE MACDURMON: Thank you. I guess the
13	the date, time and place of the continued meeting will be	13	next item is an election of officers.
14	given by announcement at this meeting.	14	MR. MIKE BRODERICK: And I'll take the gavel
15	Only matters appearing on the agenda of the	15	for a moment. And so we'll entertain I love this.
16	meeting which was continued may be discussed at the	16	For two minutes, I have all this power. But anyway, we
17	continued or reconvened meeting.	17	will entertain motions from the council for chairperson
18	Ms. Fields, roll call?	18	of the council.
19	MS. QUIANA FIELDS: Mr. Conway?	19	DR. KAREN JENNINGS: Mr. Chairman, I nominate
20	MR. WAYNE CONWAY: Present.	20	Mr. MacDurmon.
21	MS. QUIANA FIELDS: Mr. Heldebrandt?	21	MR. MIKE BRODERICK: Mr. MacDurmon has been
~ 1	<del>-</del>	22	nominated. Is there a second?
	MR. SHAWN HELDEBRANDT: Present.		
22		'	MR. JASON KIET STEINCAMD. Second
22 23	MS. QUIANA FIELDS: Mr. Honigsberg is absent.	23	MR. JASON KURT STEINCAMP: Second.
22 23 24 25		'	MR. JASON KURT STEINCAMP: Second.  MR. MIKE BRODERICK: We have a second. Any other nominations for chair? Last call, any other

1 1	Page 6 nominations for chair? Then the nominations are ended.	1	Page 8 MR. GEORGE MACDURMON: Yes.
2	I think my memory is you still want to call a vote?	2	MS. QUIANA FIELDS: Motion passed.
3	MS. QUIANA FIELDS: Yes. Mr. Conway?	3	MR. GEORGE MACDURMON: Okay. Mr. Broderick?
4	MR. WAYNE CONWAY: Yes.	4	MR. MIKE BRODERICK: First, I want to thank
5	MS. QUIANA FIELDS: Mr. Heldebrandt?	5	all the members of the council for being here. This is
6	MR. SHAWN HELDEBRANDT: Yes.	6	an essential part of DEQ. We have radiation rules. The
7	MR. GEORGE MACDURMON: Dr. Jennings.	7	board has the final approval. We have nobody, at least
8	DR. KAREN JENNINGS: Yes.	8	
وا	MS. QUIANA FIELDS: Mr. Lux.	9	to my knowledge, on the board with any radiation
10	MR. JEFF LUX: Yes.	10	background. For a long time, we had one person that had some but not now so the board depends heavily on your
11	MS. OUIANA FIELDS: Mr. Mashburn?	11	recommendation for rules. And we do have some rule
12	MR. CHAD MASHBURN: Yes.		
13		12	making which we have coming up which we're going to
14	MS. QUIANA FIELDS: Mr. Shepherd?	13	brief you on today. And this, frankly, is not very
15	MR. CHARLES SHEPHERD: Yes.	14	controversial or it's not a huge deal. But we have had,
16	MS. QUIANA FIELDS: Mr. Steincamp. MR. JASON KURT STEINCAMP: Yes.	15	in the past and probably will in the future, have some
17		16	very Karen has been here a long time and she can tell
18	MS. QUIANA FIELDS: Mr. MacDurmon? MR. GEORGE MACDURMON: Abstain.	17	you in the past we've had some very intensive
		18	discussions about rule making. So I really appreciate
19	MS. QUIANA FIELDS: Motion passed.	19	that you guys are essential, an essential part of this.
20	MR. MIKE BRODERICK: I pass the gavel back to	20	Having done that, for the staff, I'm Mike Broderick.
22	Mr. MacDurmon and he can preside over the next item.	21	Most of the people here know me. I'm the manager of the
23	MR. GEORGE MACDURMON: And we have no other office to	22	Radiation Section and I'm going to ask just the DEQ
24		23	staff. We have a new attorney, so I want to
25	MR. MIKE BRODERICK: I thought we elected them by	24	particularly mention her.
	by	23	Karen, would introduce yourself?
1	Page 7		Page 9
-	MR. GEORGE MACDURMON: Well, that's my	1	MS. KAREN JAYNE: I'm Karen Jayne and I am new
2	question to you.	2	to the radiation program, but I've been with DEQ for, I
2	question to you.  MR. MIKE BRODERICK: We usually elect a	2	to the radiation program, but I've been with DEQ for, I think, 18 years on the 20th of September. I'm glad to
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Page 10 Page 12 fishing and other things rather than be on the council. Norman. 1 2 DR. KAREN JENNINGS: How is his health? 2 MR. SHAWN HELDEBRANDT: I'm Shawn Heldebrandt. MR. MIKE BRODERICK: His health, when I talked 3 I'm a medical physicist of RSO at Hillcrest Medical 3 to him -- last time we saw him, I think at the last 4 Center. 5 meeting, and he was doing really well. He said he was 5 MR. WAYNE CONWAY: I'm Wayne Conway. I'm a still doing well, still doing fly fishing and he seems 6 manager and RSO for a local nondestructive testing firm, 6 to be in good health, but he just has other priorities. 7 Capital X-ray Services. So he's stepped down and Jeff Lux, we'll introduce him, 8 MR. MIKE BRODERICK: Quiana, I neglected to has taken his position. His profession is as a 9 mention you and your staff. I should have. Would you 10 professional engineer. That's one of the council 10 introduce yourself? positions and Jeff Lux is stepping in. 11 MS. QUIANA FIELDS: I'm Quiana Fields. I'm And for the benefit of the new members, we have 12 12 the administrative program officer for DEQ. Pretty much another new member, Charles Shepherd. He'll be replacing the secretary for the board and council. 13 14 MR. MIKE BRODERICK: I'll mention one other Eric Mitchell. But for the benefit of everybody, it's 14 been a while since we met and, particularly, for the new thing. I talked a little bit about Steve Woods. I people, I'd ask that we have the council members go 16 spent some time on him because he was a fixture. When I around and introduce themselves. think of myself, I'm not a dinosaur but I've been at MR. JASON KURT STEINCAMP: Kurt Steincamp. I'm this job since 1994. Steve Woods was here when I came. 18 with Cardinal Health. We just changed our name. It's 19 That's how long he has been here. He was chairman of 19 Nuclear and Precision Health Solutions. It's a nuclear 20 the council for many years. We want to recognize him in pharmacy in Oklahoma City. 21 some way. And probably when we have a meeting in 21 22 MR. CHAD MASHBURN: My name is Charles Oklahoma City, I'm hoping to get him to drive up and Shepherd. I work for American Airlines, their RSL. I have a plaque or something to recognize him, but he didn't want to drive to Tulsa. It's a drive for him. come with 28 years of aerospace experience starting from 25 the floor as an inspector working with radioactive But at least, hopefully, you will get to see Steve Woods Page 11 materials, both in the states of Texas and Oklahoma. one more time. 1 So, hopefully, I can contribute to this organization. MR. GEORGE MACDURMON: Okav. Members of the 2 2 MR. CHAD MASHBURN: Chad Mashburn with 3 3 public? 4 Phillips 66 and --4 MR. MIKE BRODERICK: We have one member of the THE REPORTER: I'm sorry, I didn't hear what 5 public. 5 you last said. 6 MS. CASEY SMITH: My name is Casey Smith. I'm 6 7 the assistant radiation staff officer at the University 7 DR. KAREN JENNINGS: He said a lot of of Oklahoma. George's partner in crime. В experience. 8 9 MR. JEFF LUX: I'm Jeff Lux. I work for g MR. GEORGE MACDURMON: Okay. Special Environmental Properties Management, a subsidiary of 10 activities and events. 10 Burns & McDonnell Company. I have been project manager for 11 MR. MIKE BRODERICK: Yes. Well, you may a number of nuclear decommissioning projects almost exclusive 12 notice my hair is pretty gray but it may be slightly 12 either fuel cycle facilities or naturally occurring more gray than it was two weeks ago. Last week, we had 14 the Nuclear Regulatory Commission come for its every radioactive material known as TENORM sites and I've 14 15 been working in that field since, I guess, 1994. 15 four years, as I refer to it, as a proctological 16 DR. KAREN JENNINGS: And I'm Karen Jennings 16 examination of our program. They had a team of five and I am a retired school teacher. I taught high school 17 people come in and spend a week here. If you think our 17 inspections are a pain, they send five people. They chemistry for 33 years and I am still working part time 18 spend four days with outreach on the last day. But it's as science curriculum director for our public schools. 19 19 And I went to graduate school with Mike in the early quite an experience every four years. As I mostly joke 21 '90s and we graduated, I think, the same year with our 21 about it. I get to keep my job for another four years. Their recommendation -- they evaluate us on six areas. 22 Master's. 23 And the good news is we got the highest possible rating MR. GEORGE MACDURMON: I'm George MacDurmon, 23 in all the six areas. Now, the bad news is that's 24 I'm radiation safety officer for the University of Oklahoma Health Sciences Center and the main campus in satisfactory. They don't give As. But, nevertheless,

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    it is the highest rating you can get. They did have one
    recommendation. We have -- to make a long story short,
    we out-brief people when we do the inspections. We have
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    an out-brief where we leave, but they would like to get
    the written results to people faster and we're going to
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    work on doing that, getting our written report out
    faster. So we did have that one recommendation. But we
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    got a very good rating overall. That was the
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    recommendation of the team that did the evaluation. MRC
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    management will look a it. In theory, they could change
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    something in this and that has happened. It has
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    happened. But it's not expected to happen this time.
    So that will probably be affirmed when management has
    reviewed it.
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              Other than that, John Flynn, many of you knew,
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    he has been with us for many years. He has retired. He
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    went to Pennsylvania. His parents needed him and he's
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You've seen her card there. She's new. And we have a new technical staff member. He would probably normally be here but his dog is getting operated on today. So Jordan Caldwell, some of you may have met on inspections. He has a Bachelor's in medical physics, actually, so he has a pretty good background for

ready to retire so he is gone. We have several new

people. Our administrative person is Sierra Mayfield.

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section activities and events.
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MR. GEORGE MACDURMON: Thank you. The next 2 item on the agenda is a report from me and I don't have anything to report. So we will move on the Item Number 5 9, report on potential upcoming rule changes.

Mr. Reid.

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MR. MICHAEL REID: Okay. Under our general provisions, there's exclusions added to that. And by reference, we adopt the Muclear Regulatory Commission's rules. When we adopted 10 CFR 40, which covers source material, we made a mistake in the section on unimportant quantities of source material. In a list of five types of unimportant quantities of source material, we intended for them to be excluded from our rules and reserves, NRC, but we accidentally excluded all five. The fifth category is, basically, depleted uranium counterweights. And that should not have been excluded and it is under DBQ jurisdiction. So we will be doing rule making probably starting at the next RMAC meeting at the first of the year. March, I believe.

MR. MIKE BRODERICK: We'll talk about the date later, potential dates.

DR. KAREN JENNINGS: 10 CRF?

MR. MIKE BRODERICK: 10 CFR 40.13?

MR. MICHAEL REID: Yes. That's specifically

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us, but you will see him over time.
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We haven't had any earthshattering events in the section. For the Agency as a whole, we've had drama, basically, for the budget, like every state agency. But our budgeting is sound.

For the section, like approximately 90 percent of our funding is from the user fees, license fees, which the licensees pay. The remainder is from a federal grant. We have a grant to operate on so our sections funding is good. That's something I can give you assurance on. We're in pretty sound shape. And that's true for most of DEQ. There are, I believe, six major divisions of DEQ and, if I remember right, two of them get a little bit of money from the legislature. But the greater majority of all of DEQ was set up deliberately when our industry was created as a fee funded. And that means that the drama of -- the legislative drama doesn't affect us as much as it does some other state agencies. So we're in pretty good shape from that.

20 Mike, do you have any from an upper management 21 perspective to add?

22 MR. MIKE STICKNEY: I think you've covered 23 everything.

MR. MIKE BRODERICK: Keisha or Michael, have I forgotten anything? That concludes my briefing on

under OHC 252:410-10-1(b) (7) under the Oklahoma Administrative Code.

MR. MIKE BRODERICK: That's the state rule.

MR. MICHAEL REID: Yeah, that is what 5 references CFR 40, part 13.

DR. KAREN JENNINGS: Thank you.

MR. MIKE BRODERICK: 40.13. So we'll be doing rule making. Next, we will have a rule making to correct that and some supporting things that fit in with

MR. JEFF LUX: Just to make sure I understand that correctly.

MR. MIKE BRODERICK: Yes, sir.

MR. JEFF LUX: Just to make I understand that correctly. The federal regulations exempted five different categories. DEQ wanted to retain regulation of DE counterweights, is that correct?

MR. MIKE BRODERICK: Not exactly right. There's various things listed in the federal rules. DEQ, for most source material, that's part of the reason

21 that, frankly, we messed this up because this is 22

complicated.

23 Because of some of the old cleanup sites, we 24 wanted those to stay with the NRC, but we had an agreement to stay. So most sources agree the cleanup

Page 21

Page 18 sites all have source material or most have source material. And so we wrote our rules, did our agreement 3 to keep source material with the NRC. And we should have -- there's a list of five things there and four of those things we should have included in exemptions from 6 our rule. They've been exempted from our rules because 7 they are still under federal jurisdiction. We 8 accidentally exempted all five so it depleted uranium 9 counterweights. We don't have much to do with those. 10 I've seen one twice in 24 years. Hopefully, we won't 11 have any enforcement or have any issues with those 12 because our jurisdiction is kind of nebulous. The NRC views that we have, but we did not adopt a rule that included it. 14 15 MR. GEORGE MACDURMON: Any other questions or comments? Is that your report, Mr. Reid? 17 MR. MICHAEL REID: Yes, sir. 18 MR. GEORGE MACDURMON: All right. The next up on the agenda is a report on NRC amendments to part 35, 20 which is the medical rule. 21 Ms. Cornelius. 22 MS. KEISHA CORNELIUS: I have a PowerPoint. I 23 hope everybody has a handout. There's a handout part also. It's on the screen up there, also. 24 25 NRC has made an amendment to 10 CFR 35, which

Page 20 an ophthalmologist can be named on a license now. 2 So those are the major changes. I don't see 3 anything very controversial about those changes so we have three years to become compatible with these provisions. Anyone have any questions about those? MR. JASON KURT STEINCAMP: The communication б 7 and the training on the NRC, how is that going to 5 trickle down? 9 MS. KEISHA CORNELIUS: It will be a Webinar and usually they send it out to the medical community. 13 MR. JASON KURT STEINCAMP: Okay. 12 MS. KEISHA CORNELIUS: If we know, can we send 13 it to our licensees so they can have the training also. 14 MS. CASEY SMITH: When it says added Molybdenum contamination measurement for each elution, 15 is that for departments that are doing in-house 16 17 generator stuff or would that apply to getting something from a nuclear pharmacist? 19 MS. KEISHA CORNELIUS: Just if you're eluting a generator. So if you have an in-house generator or 20 the pharmacy, so you wouldn't have to do that if you're 22 getting it from the department. MS. CASEY SMITH: Okay, great. 23 24 MR. WAYNE CONWAY: Hopefully, we can get that appraisal going with the machinery within the next --

is the medical of use of byproduct material, so these are only for our medical licensees. There's a timeline on the event. The final rule and guidance were published in the Federal Register in July. And if anybody needs a link for a copy of that, you can e-mail me and I can 6 e-mail you the link to it. NRC plans to have training sessions for NRC staff, agreement state staff and all medical licensees from now through March of next year so that all our licensees will be up on the new changes. The final rule is effective for all NRC licensees on 11 January 14, 2019. And DEQ has three years from that to be compatible with all the NRC rules. And here are some 13 of the things that are the major changes to the rules. One of them is on brachytherapy reporting for medical 14 15 events. And there will be separate reporting 16 requirements for brachytherapy. 17 For authorized users, if an authorized user has 18 a board certification from an approved NRC board, they do 19 not have to have a preceptor statement. We were waiting on that for ten years. And the preceptor statements can 20 21 also be signed by residency program directors if they need one. 22 23 There's certain training and experience that's

been grandfathered in and you can also add an associate

radiation safety officer to medical licenses only. And

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next --MR. GEORGE MACDURMON: Oh, for approving these changes? MR. WAYNE CONWAY: Yes. MR. GEORGE MACDURMON: Okay. MR. MIKE BRODERICK: I couldn't hear what you said, Wayne. MR. GEORGE MACDURMON: He said that the RMAC would receive the proposal to approve the changes at the next meeting. MR. MIKE BRODERICK: That's our plan, yes. MR. GEORGE MACDURMON: Any other questions or comments? Okay. Item Number 11 is new business. Any new business? Any matter not known about or which could not have been reasonably foreseen prior to posting this agenda. DR. KAREN JENNINGS: I have one question to ask Mike about that because I read that the EPA is

for the exclusions also. Is it possible start at the

radiation is actually going to be good for us.

MR. MIKE BRODERICK: I, myself, was thinking about that this morning. While Michael was driving in the car, I was on my phone looking around and I read an article about that. We don't have as good of a

considering easing up on the radiation rules, like

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RMAC Meeting 10/04/2018
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     communication with the EPA as we do with the NRC so all
 2 I know about that is what the media reports. I know
     there is an idea called hormesis, which she talked about
     in graduate school, Dr. Lawrence talked to us about
     many, many years ago, which I think they're basing their
     ideas on that. Now, hormesis is not a crackpot idea and
     there's evidence that shows it can have a effect.
     Whether we should have any rules. I don't think
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     everybody agrees with.
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               DR. KAREN JENNINGS: I was just curious if
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     you've had any enforcements on it.
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               MR. MIKE BRODERICK: Most of what we regulate
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     is set by the NRC and I have not heard of that from the
     NRC. The EPA, they do some things. If I recall
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18 So I don't, honestly, anticipate that affecting what our 19 agency does in radiation. 20 MR. GEORGE MACDURMON: There's actually, 21 internationally, they're going the other way, to lower the occupational radiation dose limits. And, in fact, 23 in the EU rules already and I think in most of the British Commonwealth countries, there is reduced eye 24 doses and full body doses as well, deep doses, to two

correctly, they have some role in the spent nuclear

fuel, the regulation of that, and they definitely do

radon. I have heard of that in connection with radon.

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Page 24
     effect. I can tell you there is no, there's no move to
    immediately adopt these. The NRC, my impression is
     they're not eager to move forward with this, frankly.
              DR. KAREN JENNINGS: So we have another rem
    full?
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              MR. GEORGE MACDURMON: Oh, yes.
              MR. MIKE BRODERICK: Frankly, I'll give you my
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    view on this. I'm about to turn 60 and I don't expect
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    these to be adopted while I'm still working. I'll put
    it that way.
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              MR. GEORGE MACDURMON: Any other new business?
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    Okay.
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              Mr. Broderick, the next meeting?
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              MR. MIKE BRODERICK: I would like to schedule
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    two meetings next year. I don't know that we will need
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    them, but I would like to have two set. And I've got
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    two proposed dates, date ranges, actually. If these
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    don't work for a significant number then we can change
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    them but I suggest March 22nd or 29th for the first the
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    one. I'm assuming you want to continue to meet on
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Thursdays. And September 19th or 26th for the second

the first one and September 19th or 26th for the second

MR. MIKE BRODERICK: March 22nd or 29th for

DR. KAREN JENNINGS: March 27?

Page 23 rems per year. 2 MR. MIKE BRODERICK: It's five now. MR. GEORGE MACDURMON: Five and 15 for the 3 lens of the eye now. So as Mike said, the EPA doesn't regulate a lot of what the DEQ regulates. And so my 5 anticipation is that our dose limits are going to be 6 affected by what the NRC does, not the EPA. And the NRC В has been looking at these international rules that are 9 in place and trying to determine what we're going to do in the United States. There hasn't been a determination 11 of that yet. The momentum is in the other direction. 12 MR. MIKE BRODERICK: Correct. 13 DR. KAREN JENNINGS: Okay. Thank you. 14 MR. MIKE BRODERICK: I can add, for the NRC, 15 the changes that George was talking about, particularly 16 the five rem and the 15 rem for a worker's dose and the dose to the eye. The dose to the eye, I understand, 17 would cause a lot of problems for radiologists who use 18 19 fluoroscope. I'd refer to George about that. 20 MR. GEORGE MACDURMON: And their radiation 21 safety officers, I'm sure, would have a problem. 22 MR. MIKE BRODERICK: You might have a problem. 23 And for industrial radiographers, which are very important in Oklahoma, the oil and gas industry, the five rem to two rem would take, that would have a major

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Page 25
1
    one.
2
              DR. KAREN JENNINGS: I don't know. Is that a
3
    Thursday?
 4
              MR. MIKE BRODERICK: Yeah, unless I made a big
 5
    mistake.
 6
              DR. KAREN JENNINGS: I don't know. I'm on
7
    2019, March.
8
              MR. MIKE BRODERICK: Maybe I looked at the
9
    2018 calendar by mistake. I hope not. And it looks
10
    like I looked at a different year's calendar because
11
    looking at these now, I agree.
12
              MR. GEORGE MACDURMON: Those are fly dates.
13
    So the 21st and the 28th in March. In September, you
14
    did get Thursdays in September.
15
              MR. MIKE BRODERICK: Okay.
              MR. GEORGE MACDURMON: So you did only look at
16
17
    one wrong calendar.
18
              MR. MIKE BRODERICK: I apologize for that.
19
    Quiana has an interest in this because she has to be at
20
    pretty much all of our meetings. If we used -- let's
    see, March 14th and 21st or, pardon me, 21st and 28th?
21
22
    Do you have your calendar with you?
23
              MS. QUIANA FIELDS: We talked about it
24
    yesterday. We were good.
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MR. MIKE BRODERICK: You're comfortable?

21

22

23

24

25

one.

	C Meeting 10/04/2016		· · · · · · · · · · · · · · · · · · ·
1	Page 26 MS. QUIANA FIELDS: Either one, uh-huh.	1	Page 2 dates would be appropriate and then someone seconding,
2	MR. MIKE BRODERICK: Either one. Okay. So	2	and then we can go forward.
3	the 21st or 28th?	3	
4	MR. GEORGE MACDURMON: The 21st.	4	MR. JEFF LUX: I will approve March 28 and
5	MR. MIKE BRODERICK: So it's up to the	5	September 26 as the two days for meetings for next year.
6		-	MR. GEORGE MACDURMON: Do I hear a second?
	council. Do you want to go with the 21st then?	6	MR. JASON KURT STEINCAMP: Second.
7	MR. GEORGE MACDURMON: Everybody okay with the	7	MR. GEORGE MACDURMON: Ms. Fields?
8	21st?	8	MS. QUIANA FIELDS: Mr. Conway?
9	MR. JEFF LUX: My calendar says that	9	MR. WAYNE CONWAY: Yes.
10	March 21st is a holiday.	10	MS. QUIANA FIELDS: Mr. Heldebrandt?
11	DR. KAREN JENNINGS: It's a holi. H-O-L-I is	11	MR. SHAWN HELDEBRANDT: Yes.
12	what it says. What is that?	12	MS. QUIANA FIELDS: Dr. Jennings?
13	MR. JEFF LUX: It's not spring break.	13	DR. KAREN JENNINGS: Yes.
14	MR. MIKE BRODERICK: I've got that same.	14	MS. QUIANA FIELDS: Mr. Lux?
15	MR. JEFF LUX: But there's nothing identified	15	MR. JEFF LUX: Yes.
16	what the holiday is.	16	MS. QUIANA FIELDS: Mr. Mashburn?
17	DR. KAREN JENNINGS: Mine says H-O-L-I.	17	MR. CHAD MASHBURN: Yes.
18	MR. MIKE BRODERICK: Well, we have no problem	18	MS. QUIANA FIELDS: Mr. Shepherd?
19	doing the 28th. Shall we do the 28th in the event that	19	MR. CHARLES SHEPHERD: Yes.
20	someone figures out what they're celebrating that day?	20	MS. QUIANA FIELDS: Mr. Steincamp?
21	MR. WAYNE CONWAY: I'm good with the 28th.	21	MR. JASON KURT STEINCAMP: Yes.
22	MR. MIKE BRODERICK: March 28th.	22	MS. QUIANA FIELDS: Mr. MacDurmon?
23	MR. SHAWN HELDEBRANDT: It's the 16th day of	23	MR. GEORGE MACDURMON; Yes.
24	Lent, which is apparently a moderately important date in	24	MS. QUIANA FIELDS: Motion passed.
25	the Catholic calendar.	25	MR. GEORGE MACDURMON: Mr. Broderick, any
1	Page 27 MR. MIKE BRODERICK: Okay. Well, there you	1	Page 2 announcements?
2	go. And in September, we can go with I was going to	2	MR. MIKE BRODERICK: I don't have anything
3	do what you did and look at 2020. Let's do	3	else that we haven't talked about.
4	September 19th? Everyone okay with September 19th?	4	MR. GEORGE MACDURMON: Okay. Well, then do I
5	MR. CHARLES SHEPHERD: I may have a conflict.		The state of the s
-		15	hear a motion to adjourn? Do we need a motion to
6	•	5	hear a motion to adjourn? Do we need a motion to
6	MR. MIKE BRODERICK: All right. How about the	6	adjourn?
7	MR. MIKE BRODERICK: All right. How about the 26th?	6 7	adjourn?  MS. KAREN JAYNE: Go for it.
7 8	MR. MIKE BRODERICK: All right. How about the 26th?  MR. CHARLES SHEPHERD: The 26th would be good.	6 7 8	adjourn?  MS. KAREN JAYNE: Go for it.  MR. GEORGE MACDURMON: Go for it.
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7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	MR. MIKE BRODERICK: All right. How about the 26th?  MR. CHARLES SHEPHERD: The 26th would be good. MR. MIKE BRODERICK: All right. September 26. MR. GEORGE MACDURMON: So March 28th and  September 26?  MR. MIKE BRODERICK: Yeah. DR. KAREN JENNINGS: Okay. Is it in Tulsa? MR. GEORGE MACDURMON: The next one, the March one, will be in Oklahoma City and the September one will be back here probably, maybe in this same room. It will certainly be the same building in Tulsa.  MR. MIKE BRODERICK: Okay. MR. GEORGE MACDURMON: All right. Are there any announcements?  MS. KAREN JAYNE: I think you need to vote on the date, call a roll call.	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	MS. KAREN JAYNE: Go for it.  MR. GEORGE MACDURMON: Go for it.  MR. CHAD MASHEURN: Okay. I make a motion to adjourn.  MR. GEORGE MACDURMON: Second?  MR. CHARLES SHEPHERD: Second.  MR. GEORGE MACDURMON: Okay. Can we get a roll call, please?  MS. QUIANA FIELDS: Mr. Conway?  MR. WAYNE CONWAY: Yes.  MS. QUIANA FIELDS: Mr. Heldebrandt?  MR. SHAWN HELDEBRANDT: Yes.  MS. QUIANA FIELDS: Dr. Jennings?  DR. KAREN JENNINGS: Yes.  MS. QUIANA FIELDS: Mr. Lux?  MR. JEFF LUX: Yes.

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Page 30
 1
              MR. CHARLES SHEPHERD: Yes.
2
              MS. QUIANA FIELDS: Mr. Steincamp?
              MR. JASON KURT STEINCAMP: Yes.
 3
              MS. QUIANA FIELDS: Mr. MacDurmon?
              MR. GEORGE MACDURMON: Yes.
 6
              MS. QUIANA FIELDS: Motion passed.
7
              MR. GEORGE MACDURMON: Meeting is adjourned.
8
    ADJOURNMENT: 10:35 A.M.
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25
                                                      Page 31
 1
 2
                 CERTIFICATE
 3
    STATE OF OKLAHOMA )
                              SS.
 5
    COUNTY OF TULSA
 6
              I, Marlene Johnson, a certified shorthand
    reporter within and for the State of Oklahoma, certify
    that the above meeting was taken by me in stenotype and
    thereafter transcribed by computer and is a true and
10 correct transcript of the testimony of the witness; that
    the meeting was taken on the 4th day of October, 2018, in
    Tulsa, Oklahoma; that I am not an attorney for or a
13
    relative of any party, or otherwise interested in this
14
15
               Witness my hand and seal of office on this the
    15th day of October, 2018.
17
18
                                  Marlene Johnson, CSR
19
                                  Marlene Johnson, CSR
                                  CSR No. 322
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## RADIATION MANAGEMENT ADVISORY COUNCIL

Attendance Record October 4, 2018 Tulsa, Oklahoma

## CHECK BOX TO COMMENT

NAME and/or AFFILIATION

Address and/or Phone and/or E-Mail

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MIKE STICKNEY	DEQ	405-702-5157	
Karen M. Japne	DEO	405-702-71	89 Koren gure Odgack
Mahall Pick	DEQ	(405) 702-5179	michael, reid@deg.ok.
Kurt Steinamp	CAH	(405)812-2167	Kurt. steinanne
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shaun Heldebrandi		918-706-7496	Shelde brande gma
Chad Mashburn	Pula	918 3320308	Ched mashburne pleb con
Karen Jennings	- RMAC	405-250-7183	
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